



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,585	04/22/2004	Alan Thomas Schachtely	136239	6713

7590 11/27/2007  
John S. Beulick  
Armstrong Teasdale LLP  
Suite 2600  
One Metropolitan Square  
St. Louis, MO 63102

EXAMINER
----------

GAMI, TEJAL

ART UNIT	PAPER NUMBER
----------	--------------

2121

MAIL DATE	DELIVERY MODE
-----------	---------------

11/27/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/829,585	<b>Applicant(s)</b> SCHACHTELY ET AL.	
	<b>Examiner</b> Tejal J. Gami	<b>Art Unit</b> 2121	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 September 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

1. This office action is responsive to a REQUEST FOR CONTINUED EXAMINATION entered September 18, 2007 for the patent application 10/829585.

### **Status of Claims**

2. Claims 1-42 were rejected in the last Office Action dated June 21, 2007.  
As a response to the June 21, 2007 office action, Applicant has Amended claims 1, 15, and 29.  
Claims 1-42 are now pending in this office action.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Bahrs et al. (U.S. Patent Number 6,654,932).

**As to independent claim 1**, Bahrs discloses a computer-implemented method of managing a machinery monitoring system (see Col. 12, Lines 5-16), said method comprising:

relating an asset output to at least one asset input wherein the at least one asset input includes at least one of a measured process parameter and a derived process parameter relatable to the asset output (see Col. 36, Lines 53-63);

generating at least one rule (e.g., take a user-inputted string and generates an output) based on the relation wherein the at least one rule defines the asset output based on the at least one asset input (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63);

selecting at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied asset data to test (e.g., validate) the at least one rule (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15);

determining an expected asset output for the selected data (e.g., failure results in a `ValidationRuleException`) (see Col. 36, Lines 53-63);

testing (e.g., validate) the at least one rule (e.g., take a user-inputted string and generates an output) incrementally (e.g., sequentially) using the selected asset data (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15) and by comparing each asset output to each expected asset output (e.g., failure results in a `ValidationRuleException`) (see Col. 36, Lines 53-63);

monitoring the output of the at least one rule (e.g., take a user-inputted string and generates an output) at each increment (e.g., sequentially) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15); and

outputting a test result (e.g., ValidationRuleException) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15).

**As to independent claim 15**, Bahrs discloses a computer-implemented machinery monitoring system for a plant (see Col. 12, Lines 5-16), said system comprising:

a client system comprising a user interface (see Col. 14, Lines 3-19);

a database for storing Rule Sets (see Col. 1, Lines 17-27 and Col. 31, Lines 49-53), wherein the Rule Sets (e.g., ValidationRule) include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input that includes at least one of a measured process parameter and a derived process parameter relatable to the real-time data output (e.g., take a user-inputted string and generates an output), wherein the relational expression is specific to a plant asset (e.g., business validation rule) (see Col. 32, Line 63 to Col. 33, Line 15); and

a processor programmed to control said machinery monitoring system to (see Col. 12, Lines 17-44), said processor programmed to:

prompt a user for a security control password (see Col. 62, Lines 21-55);

generate a plant asset operational rule (e.g., validation rule) from an application expert wherein the operational rule defines the real-time data output

based on the at least one real-time data input (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63);

test (e.g., validate) said rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15), wherein the test includes comparing the real-time output to an expected real-time output (e.g., failure results in a ValidationRuleException) (see Col. 36, Lines 53-63);

display incremental results of said test (see Col. 21, Lines 34-55); and  
output a test result (e.g., ValidationRuleException) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15).

**As to independent claim 29**, Bahrs discloses a computer program embodied on a computer readable medium for managing a machinery monitoring system (see Col. 12, Lines 5-16) using a server system coupled to a client system and a database (see Col. 12, Lines 17-44), said client system including a user interface (see Col. 14, Lines 3-19), said program comprising a code segment that prompts a user for a security control password (see Col. 62, Lines 21-55) and then:

relates an asset output to at least one asset input that includes at least one of a measured process parameter and a derived process parameter relatable to the asset output (see Col. 36, Lines 53-63);

generates a plant asset operational rule (e.g., validation rule) from an application expert wherein the operational rule defines an asset output based on at least one asset

input (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63);

tests (e.g., validate) said rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15) wherein the testing includes comparing the asset output to a respective expected asset output (e.g., failure results in a ValidationRuleException) (see Col. 36, Lines 53-63);

displays incremental results of said test (see Col. 21, Lines 34-55); and  
outputs said results of said test (e.g., ValidationRuleException) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15).

**As to dependent claim 2**, Bahrs teaches a method in accordance with claim 1 further comprising bundling the at least one rule into a Rule Set that includes a Rule Set encryption code (see Col. 28, Lines 17-24 and Col. 31, Lines 7-16).

**As to dependent claim 3**, Bahrs teaches a method in accordance with claim 2 wherein bundling the at least one rule into a Rule Set comprises bundling a plurality of rules into an XML file (see Col. 64, Line 60 to Col. 65, Line 4).

**As to dependent claim 4**, Bahrs teaches a method in accordance with claim 2 wherein bundling the at least one rule into a Rule Set comprising bundling at least one of a rule documentation page and a Rule Set documentation page into the Rule Set (see Col. 65, Line 66 to Col. 66, Line 15).

**As to dependent claim 5**, Bahrs teaches a method in accordance with claim 1 further comprising:

transmitting the Rule Set (e.g., validation rules) to the machinery monitoring system (see Col. 21, Lines 34-56);

decrypting (e.g., translation) the Rule Set encryption (see Col. 28, Lines 17-24);  
and

importing the Rule Set into the monitoring system (see Col. 28, Lines 24-42).

**As to dependent claim 6**, Bahrs teaches a method in accordance with claim 5 wherein importing the Rule Set (see Col. 28, Lines 24-42) comprises:

locating Rule Set files (see Col. 28, Lines 4-16);

prompting a user for an encryption key (see Col. 31, Lines 7-16); and

interpreting the Rule Set file (see Col. 28, Lines 17-23).

**As to dependent claim 7**, Bahrs teaches a method in accordance with claim 6 further comprising:

entering Rule Set information into an enterprise database (see Col. 65, Lines 5-24); and

refreshing a list of Rule Sets based on the Rule Set information (e.g., validation rules) (see Col. 21, Lines 34-56).

**As to dependent claim 8**, Bahrs teaches a method in accordance with claim 5 wherein importing the Rule Set (see Col. 28, Lines 24-42) comprises:

checking an enterprise for an existing copy of the imported Rule Set (see Col. 31, Lines 28-31);



selectively updating any of the existing Rule Sets if the imported Rule Set is a different version than the existing Rule Set (see Col. 48, Line 58 to Col. 49, Line 8); and updating assets using the imported Rule Set (see Col. 48, Line 58 to Col. 49, Line 8).

**As to dependent claim 9**, Bahrs teaches a method in accordance with claim 5 further comprising substantially preventing importing the Rule Set into the monitoring system unless an authorized encryption key is used (see Col. 31, Lines 7-16).

**As to dependent claim 10**, Bahrs teaches a method in accordance with claim 1 wherein relating an asset output to at least one input comprises relating a measurable machine asset output to at least one input (see Col. 36, Lines 53-63).

**As to dependent claim 11**, Bahrs teaches a method in accordance with claim 1 wherein relating an asset output to at least one input comprises relating a measurable machine asset output to at least one input wherein the at least one input is indicative of a machine asset anomalous behavior (see Col. 31, Lines 7-16).

**As to dependent claim 12**, Bahrs teaches a method in accordance with claim 1 wherein generating at least one rule comprises resolving the operands for the at least one rule (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63).

**As to dependent claim 13**, Bahrs teaches a method in accordance with claim 1 wherein generating at least one rule comprises documenting the rule logic for the at least one rule (see Col. 65, Line 66 to Col. 66, Line 15).

**As to dependent claim 14**, Bahrs teaches a method in accordance with claim 1 wherein relating an asset output to at least one input comprises prompting the user to enter a security control password (see Col. 31, Lines 7-16).

**As to dependent claim 16**, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to bundle the at least one rule into a Rule Set that includes a Rule Set encryption code (see Col. 28, Lines 17-24 and Col. 31, Lines 7-16).

**As to dependent claim 17**, Bahrs teaches a system in accordance with claim 16 wherein said processor is further programmed to bundle a plurality of rules into an XML file (see Col. 64, Line 60 to Col. 65, Line 4).

**As to dependent claim 18**, Bahrs teaches a system in accordance with claim 16 wherein said processor is further programmed to bundle at least one of a rule documentation page and a Rule Set documentation page into said Rule Set (see Col. 65, Line 66 to Col. 66, Line 15).

**As to dependent claim 19**, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to:

transmit said Rule Set (e.g., validation rules) to said at least one machinery monitoring system (see Col. 21, Lines 34-56);

decrypt (e.g., translation) said Rule Set encryption (see Col. 28, Lines 17-24);  
and

import said Rule Set into said at least one monitoring system (see Col. 28, Lines 24-42).

**As to dependent claim 20**, Bahrs teaches a system in accordance with claim 19 wherein said processor is further programmed to:

locate Rule Set files (see Col. 28, Lines 4-16);  
prompt a user for an encryption key (see Col. 31, Lines 7-16); and  
interpret said Rule Set file (see Col. 28, Lines 17-23).

**As to dependent claim 21**, Bahrs teaches a system in accordance with claim 20 wherein said processor is further programmed to:

enter Rule Set information into said database (see Col. 65, Lines 5-24); and  
refresh a list of Rule Sets based on said Rule Set information (see Col. 65, Lines 5-24).

**As to dependent claim 22**, Bahrs teaches a system in accordance with claim 19 wherein said processor is further programmed to:

check said database for an existing copy of said imported Rule Set (see Col. 31, Lines 28-31);

selectively update any of said existing Rule Sets if said imported Rule Set is a different version than said existing Rule Set (see Col. 48, Line 58 to Col. 49, Line 8);  
and

update assets using said imported Rule Set (see Col. 48, Line 58 to Col. 49, Line 8).

**As to dependent claim 23**, Bahrs teaches a system in accordance with claim 19 wherein said processor is further programmed to substantially prevent importing said

Rule Set into said at least one monitoring system unless an authorized encryption key is used (see Col. 31, Lines 7-16).

**As to dependent claim 24**, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to relate a measurable machine asset output to at least one input (see Col. 36, Lines 53-63).

**As to dependent claim 25**, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to relate a measurable machine asset output to at least one input that is indicative of a machine asset anomalous behavior (see Col. 31, Lines 7-16).

**As to dependent claim 26**, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to resolve the operands for the at least one rule (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63).

**As to dependent claim 27**, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to receive, from a user, documentation of the rule logic for said at least one rule (see Col. 65, Line 66 to Col. 66, Line 15).

**As to dependent claim 28**, Bahrs teaches a system in accordance with claim 15 wherein said processor is further programmed to prompt the user to enter a security control password (see Col. 31, Lines 7-16).

**As to dependent claim 30**, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that bundles said at least one rule into

a Rule Set that includes a Rule Set encryption code (see Col. 28, Lines 17-24 and Col. 31, Lines 7-16).

**As to dependent claim 31**, Bahrs teaches a computer program in accordance with claim 30 further comprising a code segment that bundles a plurality of rules into an XML file (see Col. 64, Line 60 to Col. 65, Line 4).

**As to dependent claim 32**, Bahrs teaches a computer program in accordance with claim 30 further comprising a code segment that bundles at least one of a rule documentation page and a Rule Set documentation page into said Rule Set (see Col. 65, Line 66 to Col. 66, Line 15).

**As to dependent claim 33**, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that:

transmits said Rule Set (e.g., validation rules) to said at least one machinery monitoring system (see Col. 21, Lines 34-56);

decrypts (e.g., translation) said Rule Set encryption (see Col. 28, Lines 17-24);  
and

imports said Rule Set into said at least one monitoring system (see Col. 28, Lines 24-42).

**As to dependent claim 34**, Bahrs teaches a computer program in accordance with 33 further comprising a code segment that:

locates Rule Set files (see Col. 28, Lines 4-16);

prompts a user for an encryption key (see Col. 31, Lines 7-16); and

interprets said Rule Set file (see Col. 28, Lines 17-23).

**As to dependent claim 35**, Bahrs teaches a computer program in accordance with claim 34 further comprising a code segment that:

enters Rule Set information into an enterprise database (see Col. 65, Lines 5-24); and

refreshes a list of Rule Sets based on said Rule Set information (e.g., validation rules) (see Col. 21, Lines 34-56).

**As to dependent claim 36**, Bahrs teaches a computer program in accordance with claim 33 further comprising a code segment that:

checks an enterprise database for an existing copy of said imported Rule Set (see Col. 31, Lines 28-31);

selectively updates any of said existing Rule Sets if said imported Rule Set is a different version than said existing Rule Set (see Col. 48, Line 58 to Col. 49, Line 8); and

updates assets using said imported Rule Set (see Col. 48; Line 58 to Col. 49, Line 8).

**As to dependent claim 37**, Bahrs teaches a computer program in accordance with claim 33 further comprising a code segment that substantially prevents importing said Rule Set into said at least one monitoring system unless an authorized encryption key is used (see Col. 31, Lines 7-16).

**As to dependent claim 38**, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that relates a measurable machine asset output to at least one input (see Col. 36, Lines 53-63).

**As to dependent claim 39**, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that relates a measurable machine asset output to at least one input wherein said at least one input is indicative of a machine asset anomalous behavior (see Col. 31, Lines 7-16).

**As to dependent claim 40**, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that resolves the operands for said at least one rule (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63).

**As to dependent claim 41**, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that receives, from a user, documentation of the rule logic for said at least one rule (see Col. 65, Line 66 to Col. 66, Line 15).

**As to dependent claim 42**, Bahrs teaches a computer program in accordance with claim 29 further comprising a code segment that prompts the user to enter a security control password (see Col. 31, Lines 7-16).

### ***Response to Arguments***

5. Applicant's amendment and arguments filed September 19, 2007 have been fully considered. The amendment does not overcome the original art rejection and the arguments are not persuasive. The following are the Examiner's observations in regard thereto.

#### **Applicant Argues:**

Applicants respectfully traverse the assertion within the Office Action that the term "testing" as recited in the claims of the present application and as used in the specification, is equivalent of the term "validate" as used in Bahrs. Applicants respectfully submit that the term "validation" as defined in Bahrs (see Col. 21, Lines 24-55) is not analogous to the testing of at least one rule incrementally using the selected asset data, wherein testing as defined in the present specification includes comparing an asset output to an expected asset output.

Examiner Responds:

Examiner is not persuaded. According to dictionary.com, the word "validation" is defined to mean "testing the truth of something." Under such considerations, the prior art teaches testing.

Furthermore, see MPEP 2111.04 [R-3] "Adapted to," "Adapted for," "Wherein," and "Whereby" Clauses: Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

- (A) "adapted to" or "adapted for" clauses;
- (B) "wherein" clauses; and
- (C) "whereby" clauses.

The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case. In *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a "whereby" clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention." *Id.* However, the court noted (quoting *Minton v. Nat'l Ass'n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed.



Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited."

The prior art anticipates the claims as written.

Applicant Argues:

Applicants respectfully traverse the assertion within the Office Action that the recitation of "generating at least one rule" as used in the present application is analogous to the phrase "take a user-input string and generate an output" as used in Bahrs. Specifically, applicants respectfully submit that the recitation of "generating an output" is not analogous to the claimed recitation of "generating at least one rule" wherein the generation is based on the relation between asset input and asset output.

Examiner Responds:

Examiner is not persuaded. A "rule" as defined in Applicant's specification Paragraph [0004] is simply "relating an asset output to at least one asset input." The prior art teaches generating a relation of an asset output to an asset input (i.e., rule). Under such considerations, the prior art teaches generating at least one rule.

Furthermore, see MPEP 2111.04 [R-3] "Adapted to," "Adapted for," "**Wherein**," and "Whereby" Clauses: Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

- (A) " adapted to " or "adapted for " clauses;
- (B) " **wherein** " clauses; and
- (C) " whereby " clauses.

The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case. In *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a "whereby" clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention." *Id.* However, the court noted (quoting *Minton v. Nat 'l Ass 'n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited."

The prior art anticipates the claims as written.

Applicant Argues:

Applicants respectfully traverse the assertion within the Office Action that the recitation of "monitor the output of the at least one rule" as used in the present application is analogous to the phrase "take a user-inputted string and generates an output" as used in Bahrs. Applicants respectfully submit that the action of "generating an output," as used in Bahrs, is not analogous to monitoring the output of the at least one rule at each increment to determine if the asset output matches the respective expected asset output.

Examiner Responds:

Examiner is not persuaded. Bahr teaches monitoring the output of the at least one rule (e.g., take a user-inputted string and generates an output) at each increment (e.g., sequentially) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15); and comparing each asset output to each expected asset output (e.g., failure results in a `ValidationRuleException`) (see Col. 36, Lines 53-63). Under such considerations, the prior art teaches the claims as written.

Applicant Argues:

Bahrs does not describe nor suggest generating a rule based on a pre-existing relationship between an input and an output. Rather, Bahrs describes selecting a validation rule to test user-inputted data.

Examiner Responds:

Examiner is not persuaded. A “rule” as defined in Applicant’s specification Paragraph [0004] is simply “relating an asset output to at least one asset input.” The prior art teaches generating a relation of an asset output to an asset input (i.e., rule). Under such considerations, the prior art teaches generating a rule based on a relationship between an input and an output.

Applicant Argues:

Bahrs does not describe nor suggest a computer-implemented method of managing a machinery monitoring system as is recited in Claim 1. Specifically, Bahrs does not describe nor suggest a method that includes testing a rule incrementally using selected asset data wherein testing comprises comparing the asset output to the respective expected asset output.

Examiner Responds:

Examiner is not persuaded. Bahr teaches testing (e.g., validate) the at least one rule (e.g., take a user-inputted string and generates an output) incrementally (e.g., sequentially) using the selected asset data (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15) and by comparing each asset output to each expected asset output (e.g., failure results in a ValidationRuleException) (see Col. 36, Lines 53-63). Under such considerations, the prior art anticipates the claims as written.

Applicant Argues:

Bahrs does not describe nor suggest a method that includes selecting at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied asset data to test at least one rule, and then testing the at least one rule incrementally using the selected asset data wherein the testing includes comparing the asset output to expected asset output. Rather, Bahrs describes selecting a validation rule to test user-inputted data.

Examiner Responds:

Examiner is not persuaded. Bahrs teaches user-supplied asset data (e.g., user-inputted string) to test a rule (e.g., validate) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15); and testing (e.g., validate) the at least one rule (e.g., take a user-inputted string and generates an output) incrementally (e.g., sequentially) using the selected asset data (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15) and by comparing each asset output to each expected asset output (e.g., failure results in a ValidationRuleException) (see Col. 36, Lines 53-63). Under such considerations, the prior art teaches the claims as written.

Applicant Argues:

Bahrs does not describe nor suggest a method that includes generating a rule based on a pre-existing relationship between an input and an output wherein the at least one rule defines said asset output using a combination of said at least one asset input.

Examiner Responds:

Examiner is not persuaded. A “rule” as defined in Applicant's specification Paragraph [0004] is simply “relating an asset output to at least one asset input.” The prior art teaches generating a relation of an asset output to an asset input (i.e., rule). Under such considerations, the prior art teaches generating a rule based on a relationship between an input and an output.

Furthermore, see MPEP 2111.04 [R-3] “Adapted to,” “Adapted for,” “**Wherein**,” and “Whereby” Clauses: Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

- (A) “adapted to” or “adapted for” clauses;
- (B) “**wherein**” clauses; and
- (C) “whereby” clauses.

The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case. In *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a “whereby” clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention.” *Id.* However, the court noted (quoting *Minton v. Nat’l Ass’n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a “whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.”

The prior art anticipates the claims as written.

**Applicant Argues:**

Bahrs does not describe nor suggest a computer-implemented machinery monitoring system for a plant as is recited in Claim 15. Specifically, Bahrs does not describe nor suggest a system that includes a processor programmed to test a rule based on at least one of live asset data, historical asset data, user-

supplied asset data, and third party supplied data wherein the test comprises comparing the real-time output to an expected real-time output.

Examiner Responds:

Examiner is not persuaded. Bahrs teaches a processor programmed to (see Col. 12, Lines 17-44) test (e.g., validate) said rule based on at least on of live asset data, historical asset data, user-supplied asset data, and third party supplied data (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15), wherein the test includes comparing the real-time output to an expected real-time output (e.g., failure results in a ValidationRuleException) (see Col. 36, Lines 53-63).

Furthermore, see MPEP 2111.04 [R-3] "Adapted to," "Adapted for," "Wherein," and "Whereby" Clauses: Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

- (A) "adapted to" or "adapted for" clauses;
- (B) "wherein" clauses; and
- (C) "whereby" clauses.

The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case. In *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a "whereby" clause states a condition that is material to patentability, it cannot be ignored in order to change

the substance of the invention.” Id. However, the court noted (quoting *Minton v. Nat'l Ass'n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a “whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited.”

The prior art anticipates the claims as written.

Applicant Argues:

Bahrs does not describe nor suggest a processor programmed to generate a plant asset operational rule from an application expert wherein said input includes a measured process parameter or a derived process parameter relatable to the real-time output.

Examiner Responds:

Examiner is not persuaded. Bahrs teaches a processor programmed to (see Col. 12, Lines 17-44) generate a plant asset operational rule (e.g., validation rule) from an application expert (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63) wherein said input includes at least one of a measured process parameter and a derived process parameter relatable to the real-time data output (e.g., take a user-inputted string and generates an output) (see Col. 32, Line 63 to Col. 33, Line 15). Under such considerations, the prior art anticipates the claims as written.

Applicant Argues:

Bahrs does not describe nor suggest a system that includes Rule Sets that include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input, wherein the input comprises a measured or derived process parameter relatable to the asset output, and further wherein the relational expression is specific to a plant asset.

Examiner Responds:

Examiner is not persuaded. Bahrs teaches Rule Sets (e.g., ValidationRule) that include at least one rule expressed as a relational expression of a real-time data output relative to a real-time data input, wherein the input comprises a measured or derived process parameter relatable to the asset output (e.g., take a user-inputted string and generates an output), and further wherein the relational expression is specific to a plant asset (e.g., business validation rule) (see Col. 32, Line 63 to Col. 33, Line 15). Under such considerations, the prior art anticipates the claims as written.

Applicant Argues:

Bahrs does not describe nor suggest a computer program embodied on a computer readable medium for managing a machinery monitoring system as is recited in Claim 29. Specifically, Bahrs does not describe nor suggest a computer program that tests a rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data wherein the testing includes comparing the asset output to the respective expected asset output.

Examiner Responds:

Examiner is not persuaded. Bahrs teaches a computer program system (see Col. 12, Lines 5-16) that tests (e.g., validate) said rule based on at least one of live asset data, historical asset data, user-supplied asset data, and third party supplied data (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; and Col. 32, Line 63 to Col. 33, Line 15) wherein the testing includes comparing the asset output to a respective expected asset output (e.g., failure results in a ValidationRuleException) (see Col. 36, Lines 53-63).

Furthermore, see MPEP 2111.04 [R-3] "Adapted to," "Adapted for," **Wherein,** and "Whereby" Clauses: Claim scope is not limited by claim language that suggests or



makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

- (A) "adapted to" or "adapted for" clauses;
- (B) "**wherein**" clauses; and
- (C) "whereby" clauses.

The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case. In *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a "whereby" clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention." *Id.* However, the court noted (quoting *Minton v. Nat'l Ass'n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited."

The prior art anticipates the claims as written.

**Applicant Argues:**

Bahrs does not describe nor suggest a computer program that generates a plant asset operational rule from an application expert wherein the operational rule defines an asset output using a combination of at least one asset input.

**Examiner Responds:**

Examiner is not persuaded. Bahrs teaches a computer program that (see Col. 12, Lines 17-44) generates a plant asset operational rule (e.g., validation rule) from an application expert wherein the operational rule defines an asset output based on at least one asset input (e.g., take a user-inputted string and generates an output) (see Col. 21, Lines 34-55; Col. 32, Line 63 to Col. 33, Line 15; and Col. 36, Lines 53-63).

Furthermore, see MPEP 2111.04 [R-3] "Adapted to," "Adapted for," "Wherein," and "Whereby" Clauses: Claim scope is not limited by claim language that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure. However, examples of claim language, although not exhaustive, that may raise a question as to the limiting effect of the language in a claim are:

- (A) "adapted to" or "adapted for" clauses;
- (B) "wherein" clauses; and
- (C) "whereby" clauses.

The determination of whether each of these clauses is a limitation in a claim depends on the specific facts of the case. In *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329, 74 USPQ2d 1481, 1483 (Fed. Cir. 2005), the court held that when a "whereby" clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention." *Id.* However, the court noted (quoting *Minton v. Nat 'l Ass 'n of Securities Dealers, Inc.*, 336 F.3d 1373, 1381, 67 USPQ2d 1614, 1620 (Fed. Cir. 2003)) that a "whereby clause in a method claim is not given weight when it simply expresses the intended result of a process step positively recited."

The prior art anticipates the claims as written.

***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eryurek et al. (U.S. Patent Number: 6,795,798) teaches remote analysis of process control plant data.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tejal J. Gami whose telephone number is (571) 270-1035. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Vincent can be reached on (571) 272-3080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:  
10/829,585  
Art Unit: 2121

Page 27

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Vincent  
Supervisory Patent Examiner  
Tech Center 2100

TJG  
TJG

*Ronald Hartman, Jr.*  
RONALD HARTMAN, JR.  
PRIMARY EXAMINER  
11/25/2007  
XRDH